

2. AMENDMENT/MODIFICATION NO. 0003	3. EFFECTIVE DATE 20 January 2004	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. <i>(If applicable)</i>
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6. ISSUED BY U.S. ARMY ENGINEER DISTRICT, ALBUQUERQUE CORPS OF ENGINEERS 4101 JEFFERSON PLAZA, N.E. ALBUQUERQUE, NEW MEXICO 87109-3435	7. ADMINISTERED BY <i>(If other than Item 6)</i> U.S. ARMY ENGINEER DISTRICT, ALBUQUERQUE CORPS OF ENGINEERS 4101 JEFFERSON PLAZA, N.E. ALBUQUERQUE, NEW MEXICO 87109-3435
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8. NAME AND ADDRESS OF CONTRACTOR <i>(No., street, county, State and ZIP Code)</i>	{ <input checked="" type="checkbox"/> }	9A. AMENDMENT OF SOLICITATION NO. W912PP-04-R-0004
	<input checked="" type="checkbox"/>	9B. DATED <i>(SEE ITEM 11)</i> 20 January 2004
		10A. MODIFICATION OF CONTRACTS/ORDER NO.
		10B. DATED <i>(SEE ITEM 13)</i>
CODE		FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

{ <input checked="" type="checkbox"/> }	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: <i>(Specify authority)</i> THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES <i>(such as changes in paying office, appropriation date, etc.)</i> SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER <i>(Specify type of modification and authority)</i>

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

PROJECT: DESIGN/BUILD, UPGRADE NATIONAL RADAR CROSS-SECTION (RCS) TEST FACILITY, WHITE SANDS MISSILE RANGE, OTERO COUNTY, NEW MEXICO

1. This is Amendment No. 3 to Solicitation No. W912PP-04-R-0004; 20 January 2004. The following revisions shall be incorporated into the specifications and drawings. All other provisions shall remain unchanged.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>	16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>		
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
<i>(Signature of person authorized to sign)</i>		BY _____ <i>(Signature of Contracting Officer)</i>	

2. SPECIFICATIONS: Delete the following listed pages and substitute the pages attached hereto. On the revised pages, for convenience, changes are emphasized by the amendment number in parentheses before and after changes from the previous issue. All portions of the revised (or new) pages shall apply whether or not changes have been indicated.

<u>Delete Page</u>	<u>Insert Page</u>
<u>Volume 1 of 3</u>	
00800-4	00800-4
00800-6	00800-6
<u>Volume 3 of 3</u>	
Appendix Index	Appendix Index
--	Appendix G, Lab Results and Well Information (remove "To be provided" page)
--	Appendix O – Drawings (For Information Only)*

*Note: The drawings in Appendix O are provided on CD in "cal" and manipulatable format. The CD will be mailed to all registered plan holders.

3. DRAWING CHANGES: The following drawings have been revised and the sequence number changed to indicate such revision: 1.1, 2.1 and 3.1.

4. DRAWING CHANGES: The following drawings are new and shall be added to Appendix F:

- Sequence No. 4 – Subsurface Investigation Plan
- Sequence No. 5 – Boring Logs

////////LAST ITEM////////

(5) Reproduce and print contract drawings and specifications as needed.

(c) In general

(1) Large-scale drawings shall govern small-scale drawings.

(2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and the following list of drawings hereby incorporated into the contract for the development of design documents after award. Schedules included in the drawings are for the purpose of defining requirements other than quantities:

CRITERIA MAPS AND SURVEYS	
DESIGN/BUILD RFP DOCUMENTS UPGRADE NATIONAL RADAR CROSS-SECTION TEST FACILITY, WHITE SANDS MISSILE RANGE, NEW MEXICO	
Sequence No.	Title
(3) (See Appendix F)	(3) The list of drawings is hereby incorporated into the contract for the development of design documents after award. Schedules included in the drawings are for the purpose of defining requirements other than quantities.

5. TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (ER 415-1-15) (OCT 1989).

(a) This provision specifies the procedure for the determination of time extensions for unusually severe weather in accordance with the Contract Clause entitled "DEFAULT (FIXED PRICE CONSTRUCTION)". In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

(2) Supplies (other than procurement from a nonmanufacturer of such supplies). The concern shall perform work for at least 50 percent of the cost of manufacturing the supplies, not including the cost of materials.

(3) General Construction. The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees.

(4) Construction by Special Trade Contractors. The concern will perform at least 25 percent of the cost of the contract, not including the cost of materials, with its own employees.

7. PHYSICAL DATA (FAR 52.236-4) (APR 1984). Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(3) (a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by surveys. Soil exploration data is provided in Appendix F and G. (3)

(b) Transportation Facilities: Highways and railroads are as shown on the drawings.

8. AVAILABILITY AND USE OF UTILITY SERVICES (FAR 52.236-14) (APR 1984).

(a) The Government shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the Government or, where the utility is produced by the Government, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.

(b) The Contractor, at its expense and in a workmanlike manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the work by the Government, the Contractor shall remove all the temporary connections, distribution lines, meters and associated paraphernalia.

9. LAYOUT OF WORK (FAR 52.236-17) (APR 1984). The Contractor shall lay out its work from Government-established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its

APPENDIX INDEX

- APPENDIX A - DESIGN COMPATIBILITY STANDARDS, HOLLOMAN AIR FORCE BASE, NEW MEXICO
- APPENDIX B - AIR FORCE MATERIEL COMMAND INSTALLATION (AFMC) ENTRY CONTROL POINT DESIGN GUIDE
- APPENDIX C - DOD UNIFIED FACILITIES CRITERIA (UFC) MINIMUM ANTITERRORISM STANDARDS FOR BUILDINGS
- APPENDIX D - FINAL FOUNDATION DESIGN ANALYSIS EXAMPLE
- APPENDIX E - FINAL PAVEMENT DESIGN ANALYSIS EXAMPLE
- APPENDIX F - CIVIL DRAWINGS
- APPENDIX G - GEOTECHNICAL INFORMATION
- APPENDIX H - SPECIFICATIONS GUIDANCE
- APPENDIX I - COLOR BOARD GUIDANCE
- APPENDIX J - DESIGN ANALYSIS GUIDANCE
- APPENDIX K - DRAFTING STANDARDS
- APPENDIX L - METRIC DESIGN GUIDE
- APPENDIX M - REVEGETATION AND EROSION CONTROL
- APPENDIX N - STORM WATER POLLUTION PREVENTION PLAN OUTLINE GUIDE
- (3) APPENDIX O - DRAWINGS (FOR INFORMATION ONLY) (3)

Table 1. Summary of Soil Characteristics

Borehole ID	sample depth (ft.)	Blow Count	USCS Classification	liquid limit	plasticity index	gravimetric moisture content	% finer than US #4 sieve (by weight)	% finer than US #40 sieve (by weight)	% finer than US #200 sieve (by weight)
AG-01	2.5	50	GM	NV	NP	3.0	50	22	13.4
AG-01	5.0	15,6,5	CL	27	12	6.9	72	59	49.7
AG-01	7.5	5,3,4	ML	24	3	8.8	84	78	65.2
AG-01	10.0	2,2,3	CL	28	10	11.9	-	99	95.0
AG-02	2.5	7,10,17	GM-GP	NV	NP	2.8	36	20	10.4
AG-02	5.0	11,16,19	GM	NV	NP	3.1	50	27	15.1
AG-02	7.5	14,18,13	-	-	-	-	-	-	-
AG-02	10	22,34,26	GM-GP	NV	NP	2.4	40	20	9.3
AG-02	12.5	28,32,43	GM	NV	NP	3.6	52	27	17.4
AG-02	15.0	22,37,26	GM-GP	NV	NP	2.0	53	20	9.2
AG-02	17.5	50	GM	NV	NP	5.2	51	25	16.8
AG-02	20.0	46,50,40	GM-GP	NV	NP	1.6	34	13	7.3
AG-03	2.5	4,6,6	CL-ML	26	6	7.7	95	89	52.8
AG-03	5.0	18,24,40	GM	NV	NP	2.1	51	30	14.4
AG-03	7.5	22,28,33	GM-GP	NV	NP	1.0	47	19	10.5
AG-03	10.0	50	SM	NV	NP	1.0	77	32	17.6
AG-03	12.5	15,13,9	GM	NV	NP	3.9	62	38	25.3
AG-03	15.0	37,50	GM-GP	NV	NP	1.5	46	18	10.9
AG-03	17.5	25,33,33	GM-GP	NV	NP	2.3	59	22	11.3
AG-03	20.0	50,32,25	GM	NV	NP	1.5	60	24	14.2
AG-04	2.5	22,26,45	GM	NV	NP	2.9	54	24	15.5
AG-04	5.0	50	GC	22	10	3.6	47	23	15.1
AG-04	7.5	27,40,33	GM	NV	NP	0.4	54	23	12.8
AG-04	10.0	25,22,27	SM-SP	NV	NP	1.3	66	23	11.1
AG-04	12.5	31,46,35	GM	NV	NP	1.0	54	22	12.3
AG-04	15.0	24,24,17	GM	NV	NP	2.3	55	21	13.3
AG-04	17.5	46,50	SM	NV	NP	2.6	69	30	18.1
AG-04	20.0	50	ML	NV	NP	3.2	94	85	81.9
AG-05	2.5	36,50	SM	NV	NP	4.1	77	30	18.1
AG-05	5.0	29,50	GM	NV	NP	2.7	60	27	16.0
AG-05	7.5	43,33,36	SM	NV	NP	2.6	65	24	12.9
AG-05	10.0	37,50	GM	NV	NP	2.6	62	30	15.5
AG-05	12.5	50	GP	NV	NP	0.5	6	2	1.3
AG-05	15.0	32,45,40	GM	NV	NP	3.0	54	23	13.8
AG-05	17.5	50	GM	NV	NP	3.9	39	23	13.9
AG-05	20.0	50	--	--	--	--	--	--	--

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-01 @ 2.5'

SAMPLE: Gravel (GM)

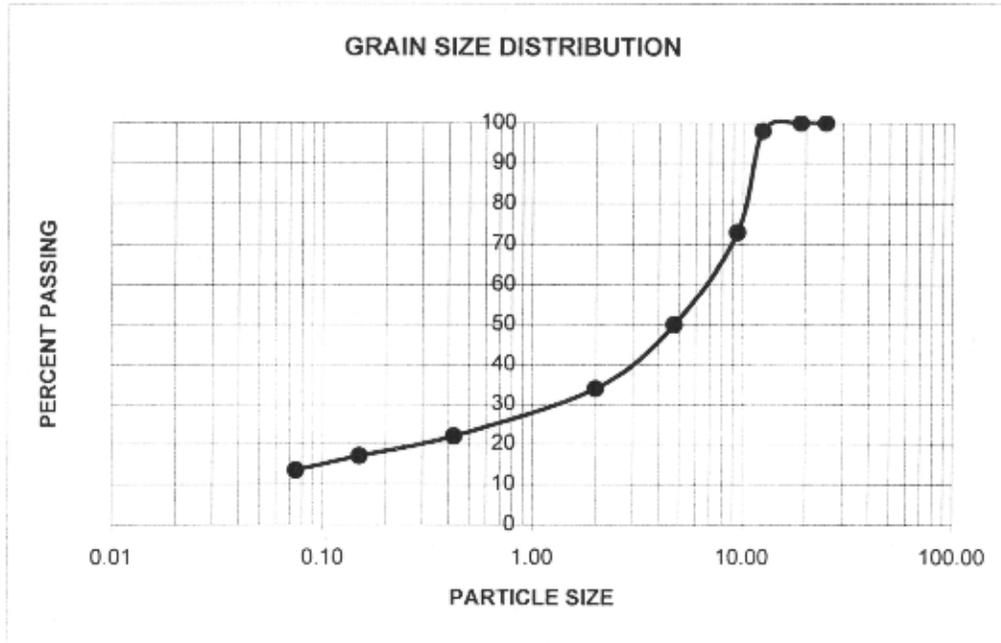
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
3/4"	100
1/2"	98
3/8"	73
No. 4	50
No. 10	34
No. 40	22
No. 100	17
No. 200	13.4

Moisture Content (%) 3.0



GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

Department of the Army
 Albuquerque District Corps of Engineers
 4101 Jefferson Plaza NE
 Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-01 @ 5'

SAMPLE: Clay (CL)

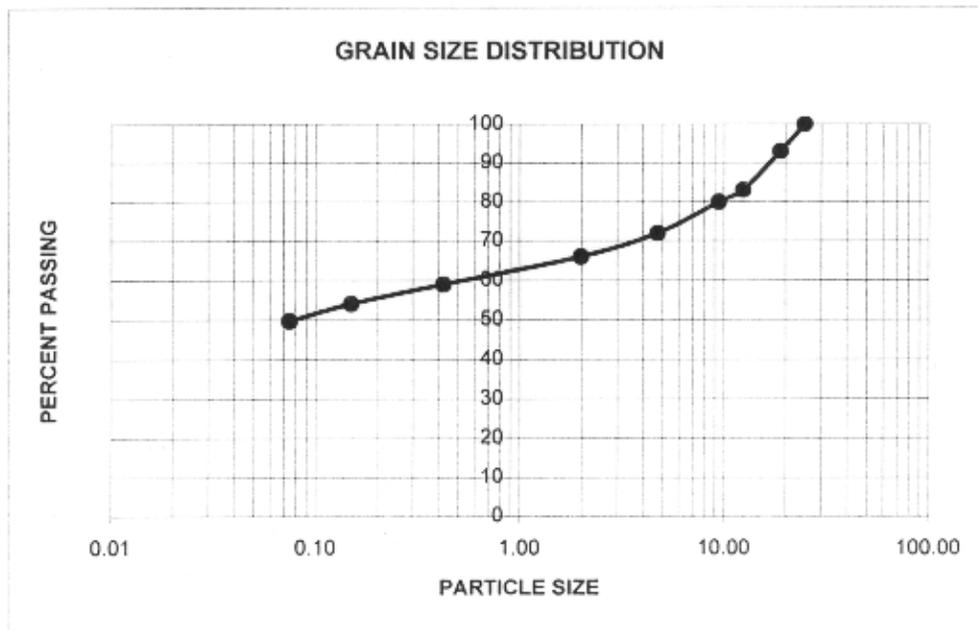
ATTEBERG LIMITS (ASTM D-4318)

Liquid Limit 27
 Plasticity Index: 12

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	93
1/2"	83
3/8"	80
No. 4	72
No. 10	66
No. 40	59
No. 100	54
No. 200	49.7

Moisture Content (%) 6.9



GEO-TEST, INC.
 3204 RICHARDS LANE
 SANTA FE,
 NEW MEXICO
 87507
 (505) 471-1101
 FAX (505) 471-2245

8528 CALLE ALAMEDA NE
 ALBUQUERQUE,
 NEW MEXICO
 87113
 (505) 857-0933
 FAX (505) 857-0803

2805-A LAS VEGAS CT.
 LAS CRUCES
 NEW MEXICO
 88007
 (505) 526-6260
 FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

[Signature]
 Tim Byres, SET

Addressee: (2)

Department of the Army
Albuquerque District Corps of Engineers
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 9, 2004

Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-01 @ 7.5'

SAMPLE: Clayey Silt (ML)

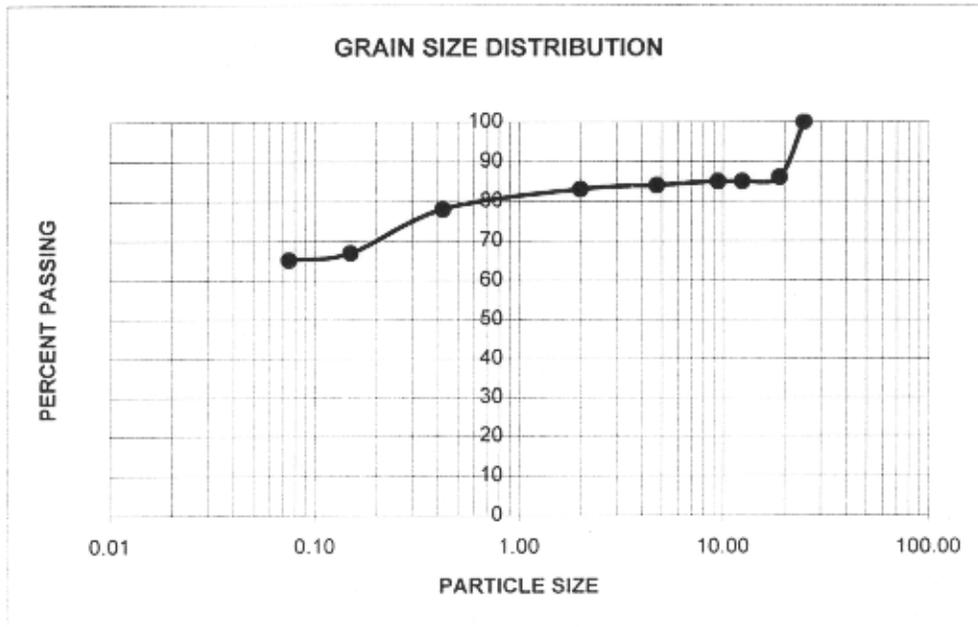
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit 24
Plasticity Index: 3

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	86
1/2"	85
3/8"	85
No. 4	84
No. 10	83
No. 40	78
No. 100	67
No. 200	65.2

Moisture Content (%) 8.8



Respectfully Submitted:
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Tim Byres, SET
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Addressee: (2)

GEO-TEST

GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-01 @ 10'

SAMPLE: Clay (CL)

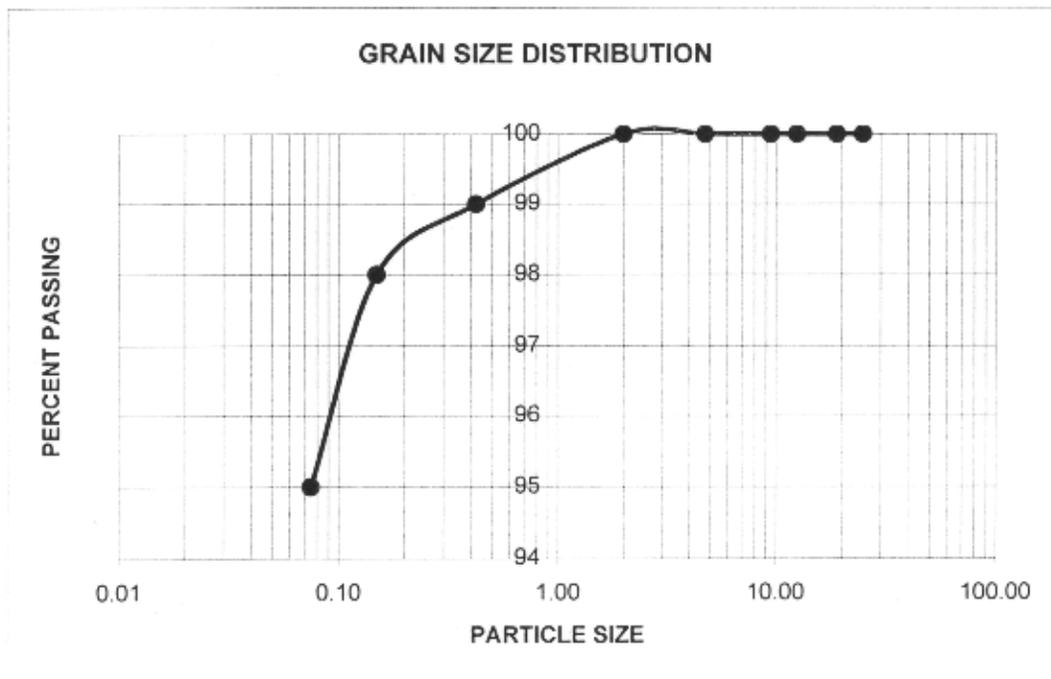
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit 28
 Plasticity Index: 10

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
No. 10	100
No. 40	99
No. 100	98
No. 200	95.0

Moisture Content (%) 11.9



GEO-TEST, INC.
 3204 RICHARDS LANE
 SANTA FE,
 NEW MEXICO
 87507
 (505) 471-1101
 FAX (505) 471-2245

8528 CALLE ALAMEDA NE
 ALBUQUERQUE,
 NEW MEXICO
 87113
 (505) 857-0933
 FAX (505) 857-0803

2805-A LAS VEGAS CT.
 LAS CRUCES
 NEW MEXICO
 88007
 (505) 526-6260
 FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

[Signature]
 Jim Byres, SET

Addressee: (2)

Department of the Army
Albuquerque District Corps of Engineers
Transportation Department
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 6, 2004
Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-02 @ 2.5'

SAMPLE: Slightly Silty Gravel (GM-GP)

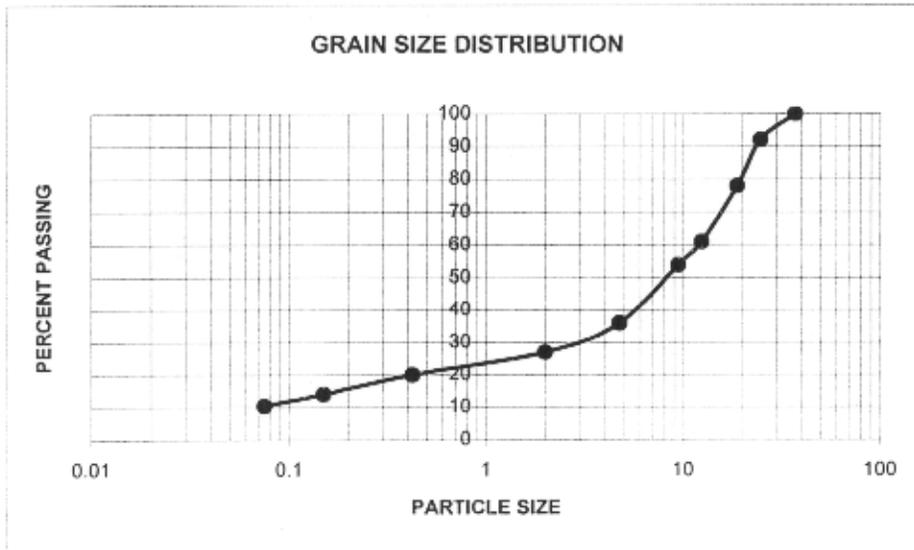
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1.5"	100
1"	92
3/4"	78
1/2"	61
3/8"	54
No. 4	36
No. 10	27
No. 40	20
No. 100	14
No. 200	10.4

Moisture Content (%) 2.8



GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

Department of the Army
Albuquerque District Corps of Engineers
Transportation Department
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-02 @ 5'

SAMPLE: Gravel (GM)

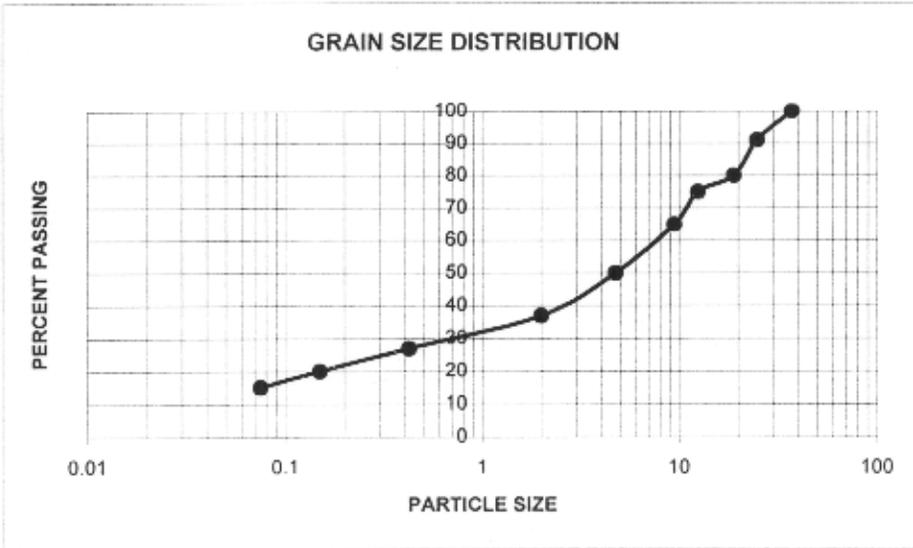
ATTEBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1.5"	100
1"	91
3/4"	80
1/2"	75
3/8"	65
No. 4	50
No. 10	37
No. 40	27
No. 100	20
No. 200	15.1

Moisture Content (%) 3.1



GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.



Jim Byres, SET

Addressee: (2)

Department of the Army
Albuquerque District Corps of Engineers
Transportation Department
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-02 @ 10'

SAMPLE: Slightly Silty Gravel (GM-GP)

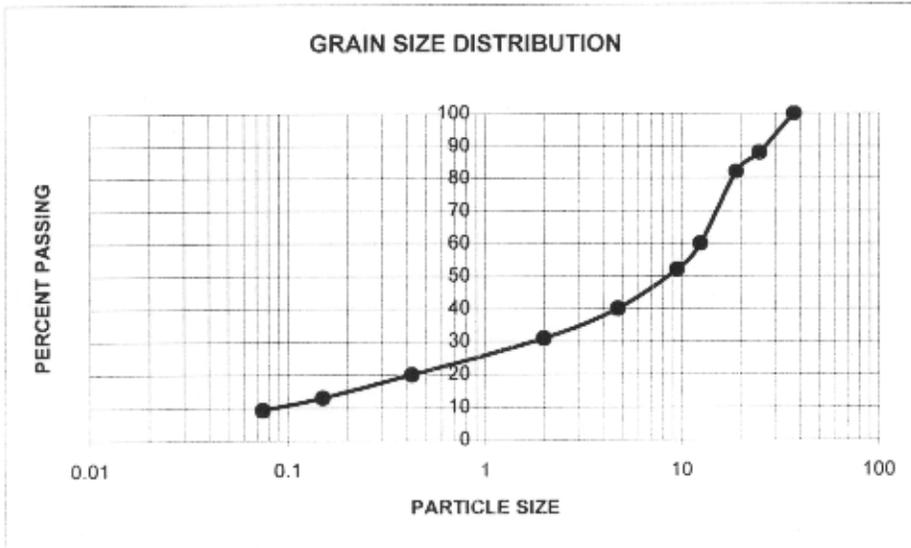
ATTEBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1.5"	100
1"	88
3/4"	82
1/2"	60
3/8"	52
No. 4	40
No. 10	31
No. 40	20
No. 100	13
No. 200	9.3

Moisture Content (%) 2.4



GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Jim Byres, SET

Addressee: (2)

Department of the Army
 Albuquerque District Corps of Engineers
 Transportation Department
 4101 Jefferson Plaza NE
 Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-02 @ 12.5'

SAMPLE: Gravel (GM)

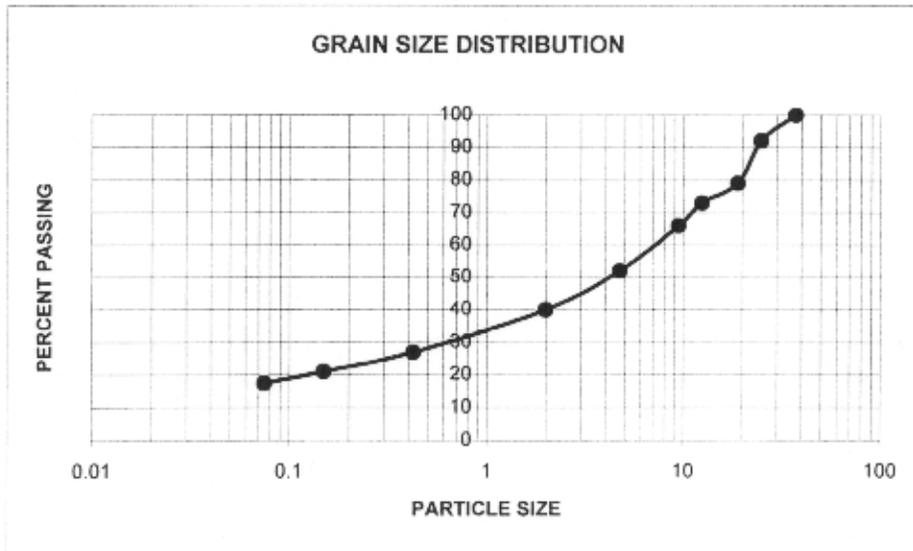
ATTEBERG LIMITS (ASTM D-4318)

Liquid Limit NV
 Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1.5"	100
1"	92
3/4"	79
1/2"	73
3/8"	66
No. 4	52
No. 10	40
No. 40	27
No. 100	21
No. 200	17.4

Moisture Content (%) 3.6



GEO-TEST, INC.
 3204 RICHARDS LANE
 SANTA FE,
 NEW MEXICO
 87507
 (505) 471-1101
 FAX (505) 471-2245

8528 CALLE ALAMEDA NE
 ALBUQUERQUE,
 NEW MEXICO
 87113
 (505) 857-0933
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2805-A LAS VEGAS CT.
 LAS CRUCES
 NEW MEXICO
 88007
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 Transportation Department
 4101 Jefferson Plaza NE
 Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-02 @ 15'

SAMPLE: Slightly Silty Gravel (GM-GP)

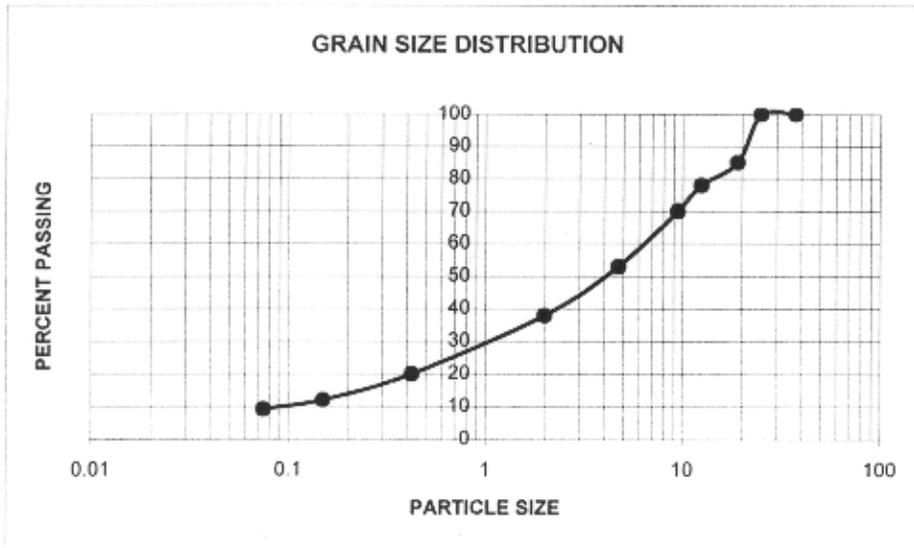
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
 Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1.5"	100
1"	100
3/4"	85
1/2"	78
3/8"	70
No. 4	53
No. 10	38
No. 40	20
No. 100	12
No. 200	9.2

Moisture Content (%) 2.0



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 SANTA FE,
 NEW MEXICO
 87507
 (505) 471-1101
 FAX (505) 471-2245

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 ALBUQUERQUE,
 NEW MEXICO
 87113
 (505) 857-0933
 FAX (505) 857-0803

2805-A LAS VEGAS CT.
 LAS CRUCES
 NEW MEXICO
 88007
 (505) 526-6260
 FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET
 Tim Byres, SET

Addressee: (2)

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-02 @ 17.5'

SAMPLE: Gravel (GM)

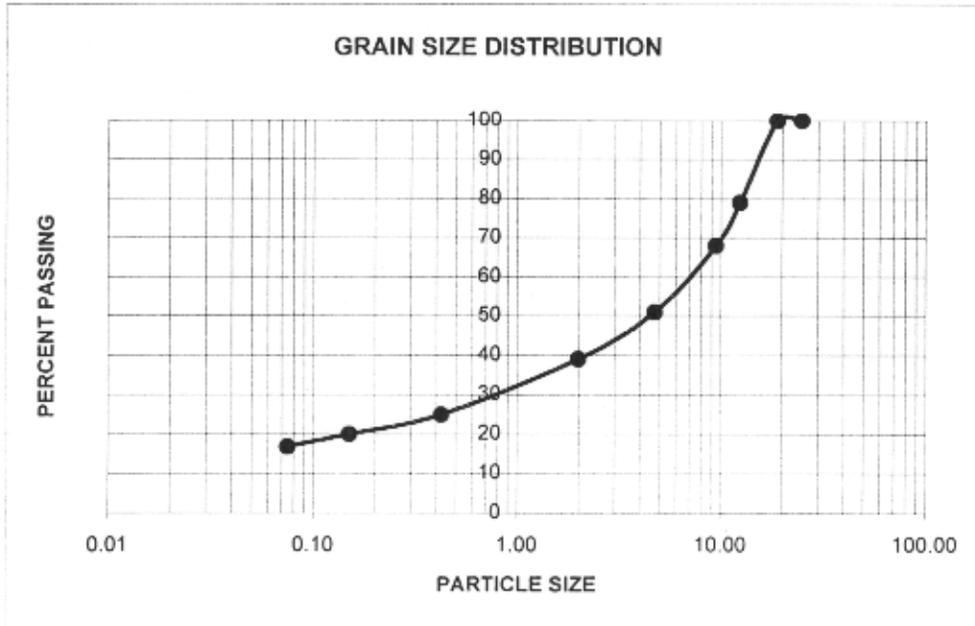
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	100
1/2"	79
3/8"	68
No. 4	51
No. 10	39
No. 40	25
No. 100	20
No. 200	16.8

Moisture Content (%) 5.2



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SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

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ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

Department of the Army
 Albuquerque District Corps of Engineers
 Transportation Department
 4101 Jefferson Plaza NE
 Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-02 @ 20'

SAMPLE: Slightly Silty Gravel (GM-GP)

ATTEBERG LIMITS (ASTM D-4318)

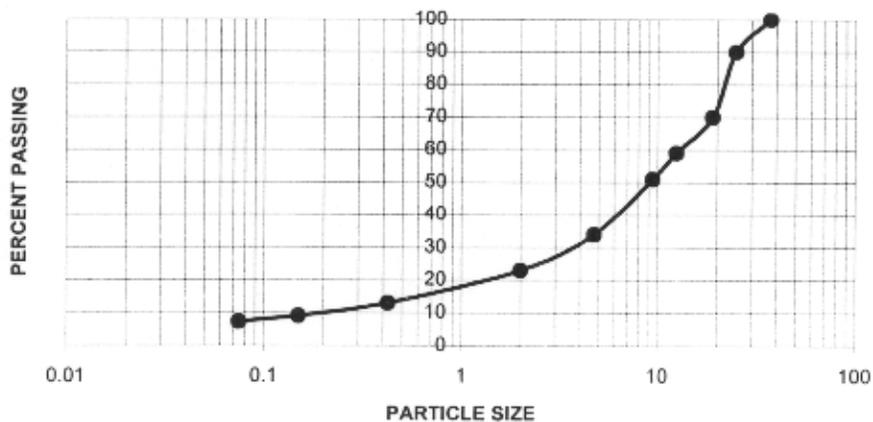
Liquid Limit NV
 Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1.5"	100
1"	90
3/4"	70
1/2"	59
3/8"	51
No. 4	34
No. 10	23
No. 40	13
No. 100	9
No. 200	7.3

Moisture Content (%) 1.6

GRAIN SIZE DISTRIBUTION



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 NEW MEXICO
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 FAX (505) 857-0803

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 LAS CRUCES
 NEW MEXICO
 88007
 (505) 526-6260
 FAX (505) 523-1660

Respectfully Submitted:
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[Signature]
 Tim Byres, SET

Addressee: (2)

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-03 @ 2.5'

SAMPLE: Silty Clay (CL-ML)

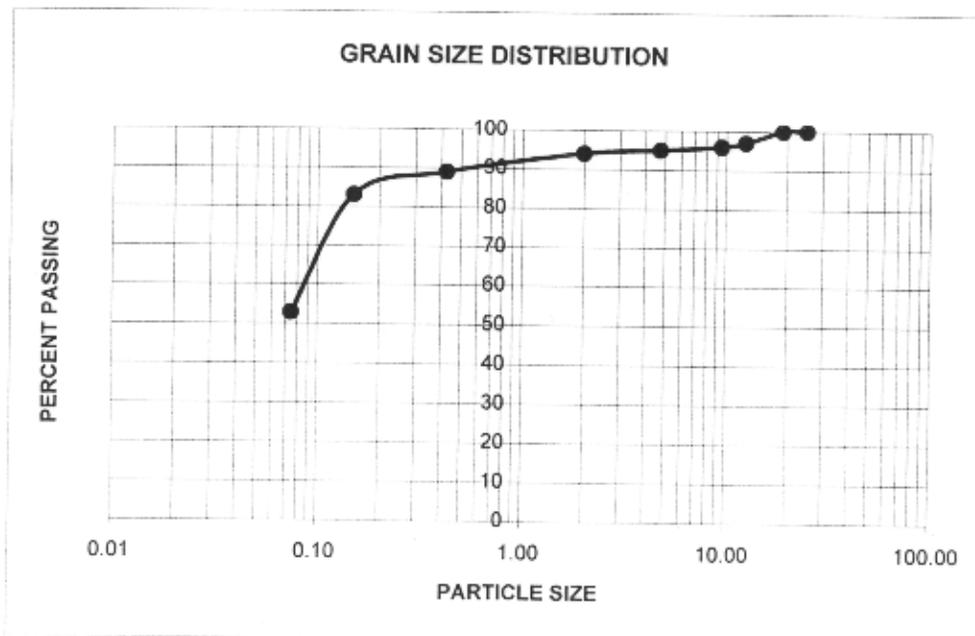
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit 26
 Plasticity Index: 6

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	100
1/2"	97
3/8"	96
No. 4	95
No. 10	94
No. 40	89
No. 100	83
No. 200	52.8

Moisture Content (%) 7.7



Respectfully Submitted:
GEO-TEST, INC.

[Signature]
 Tim Byres, SET

Addressee: (2)

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-03 @ 5'

SAMPLE: Gravel (GM)

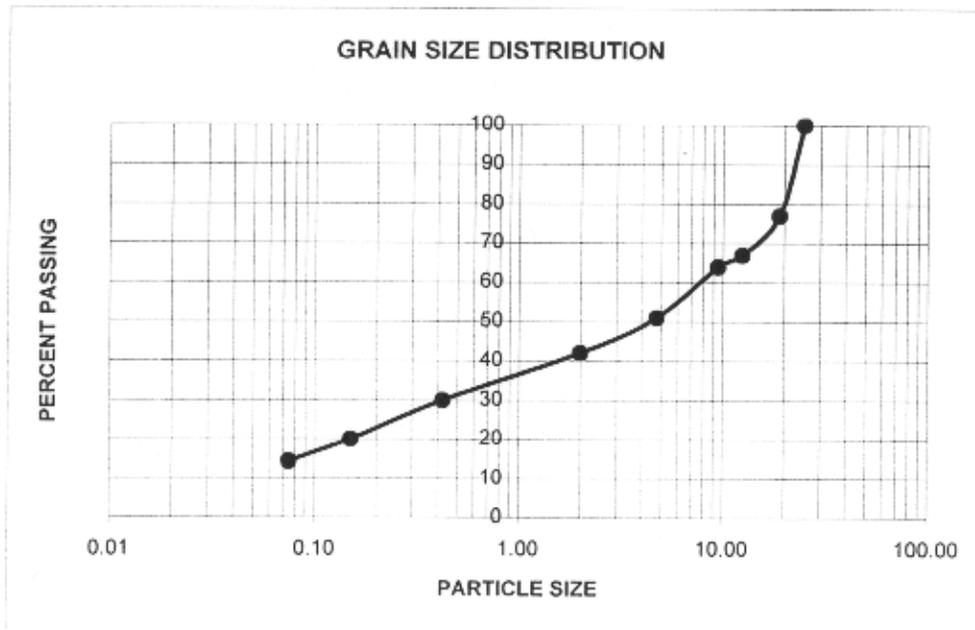
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
 Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	77
1/2"	67
3/8"	64
No. 4	51
No. 10	42
No. 40	30
No. 100	20
No. 200	14.4

Moisture Content (%) 2.1



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 NEW MEXICO
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 FAX (505) 857-0803

2805-A LAS VEGAS CT.
 LAS CRUCES
 NEW MEXICO
 88007
 (505) 526-6260
 FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-03 @ 7.5'

SAMPLE: Slightly Silty Gravel (GM-GP)

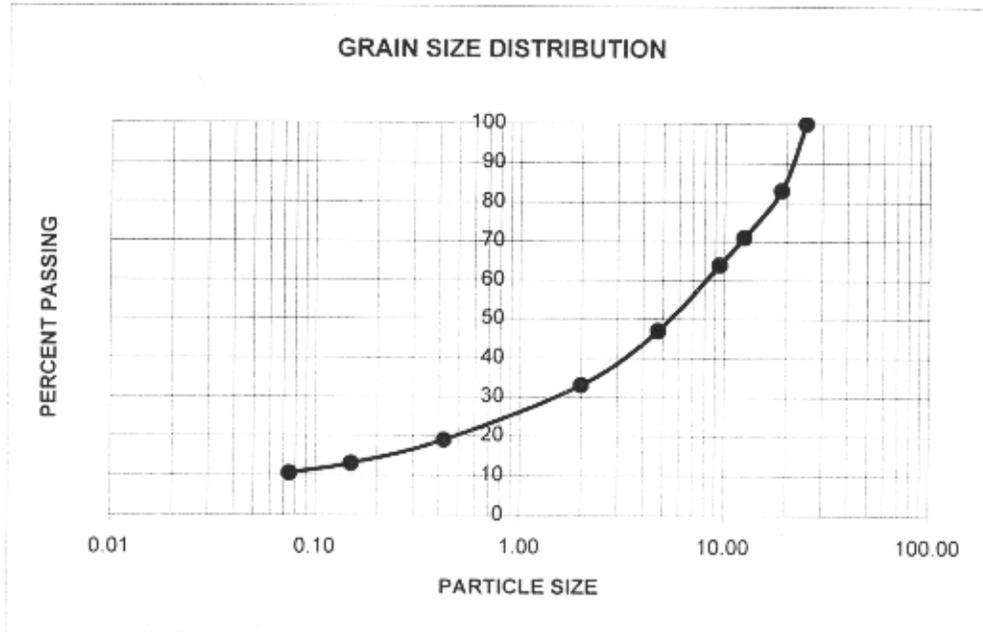
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	83
1/2"	71
3/8"	64
No. 4	47
No. 10	33
No. 40	19
No. 100	13
No. 200	10.5

Moisture Content (%) 1.0



Respectfully Submitted:
GEO-TEST, INC.



Jim Byres, SET

Addressee: (2)

GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

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LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660



Department of the Army
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 4101 Jefferson Plaza NE
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February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-03 @ 10'

SAMPLE: Silty Sand (SM)

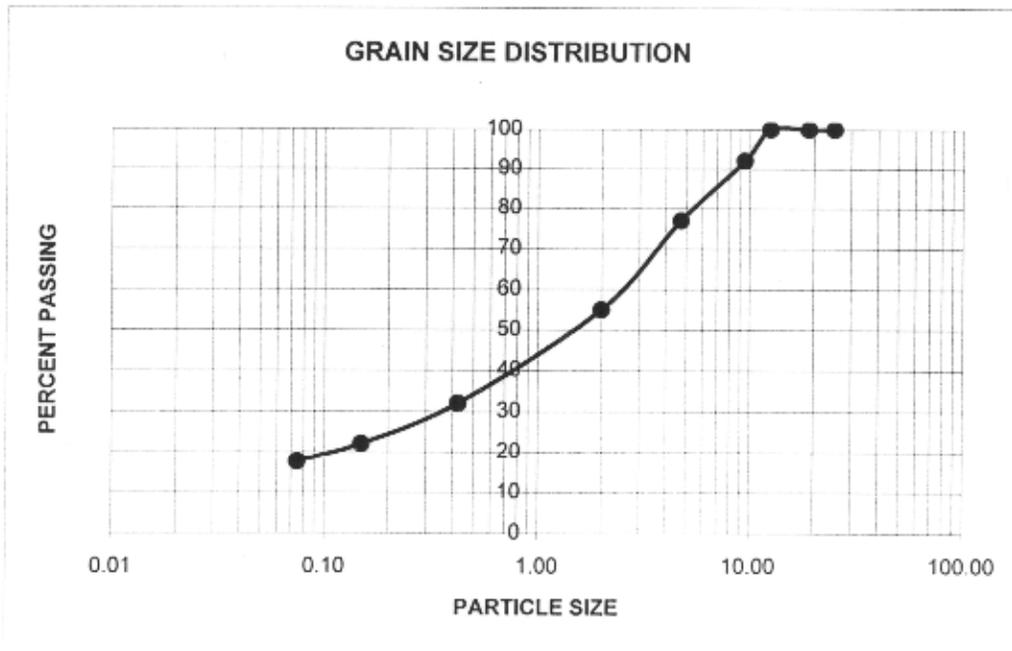
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
 Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1/2"	100
3/8"	92
No. 4	77
No. 10	55
No. 40	32
No. 100	22
No. 200	17.6

Moisture Content (%) 1.0



Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

GEO-TEST, INC.
 3204 RICHARDS LANE
 SANTA FE,
 NEW MEXICO
 87507
 (505) 471-1101
 FAX (505) 471-2245

8528 CALLE ALAMEDA NE
 ALBUQUERQUE,
 NEW MEXICO
 87113
 (505) 857-0933
 FAX (505) 857-0803

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 NEW MEXICO
 88007
 (505) 526-6260
 FAX (505) 523-1660

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4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-03 @ 12.5'

SAMPLE: Gravel (GM)

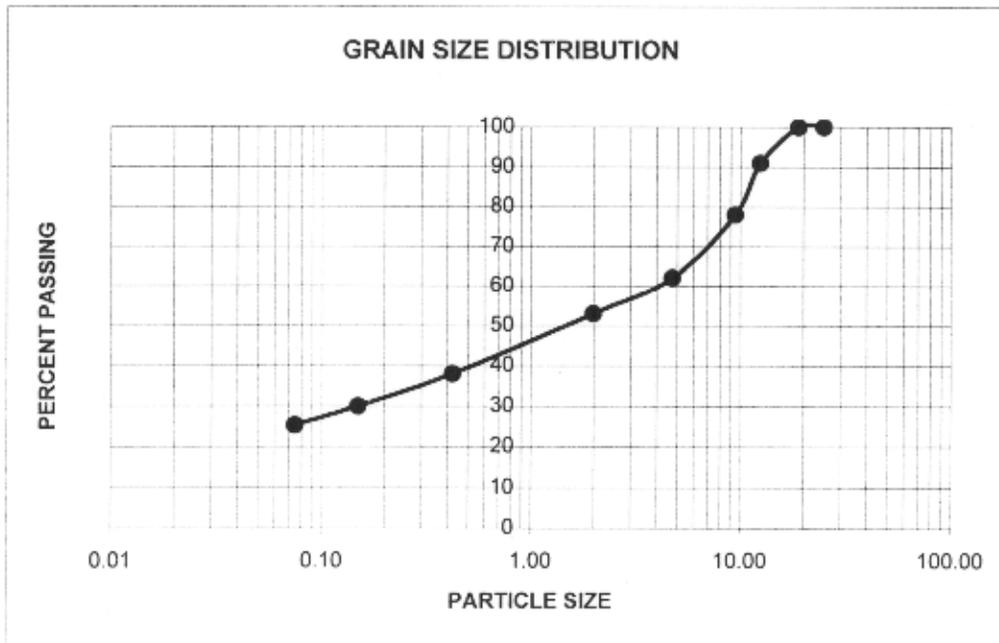
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
3/4"	100
1/2"	91
3/8"	78
No. 4	62
No. 10	53
No. 40	38
No. 100	30
No. 200	25.3

Moisture Content (%) 3.9



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3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.



Tim Byres, SET

Addressee: (2)

Department of the Army
Albuquerque District Corps of Engineers
Transportation Department
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-03 @ 15'

SAMPLE: Slightly Silty Gravel (GM-GP)

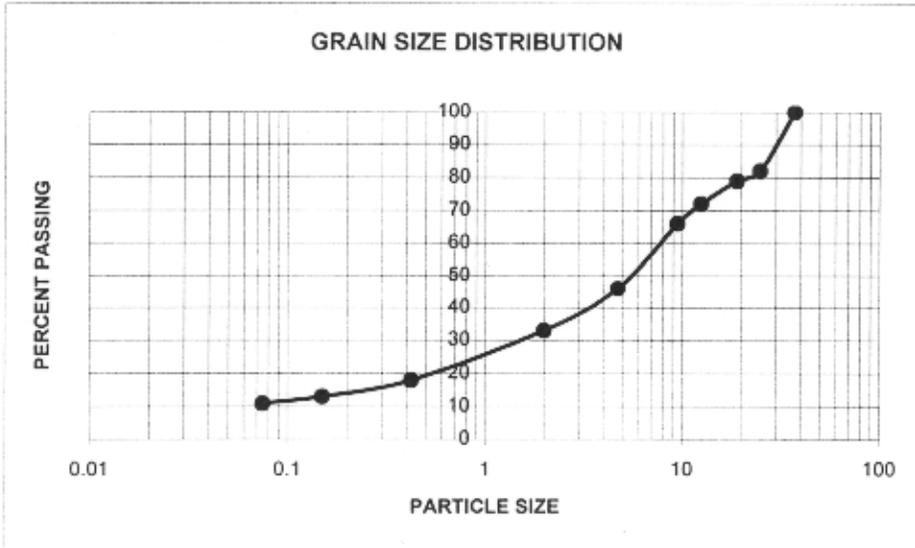
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1.5"	100
1"	82
3/4"	79
1/2"	72
3/8"	66
No. 4	46
No. 10	33
No. 40	18
No. 100	13
No. 200	10.9

Moisture Content (%) 1.5



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3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

Department of the Army
Albuquerque District Corps of Engineers
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 6, 2004
Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-03 @ 17.5'

SAMPLE: Slightly Silty Gravel (GM-GP)

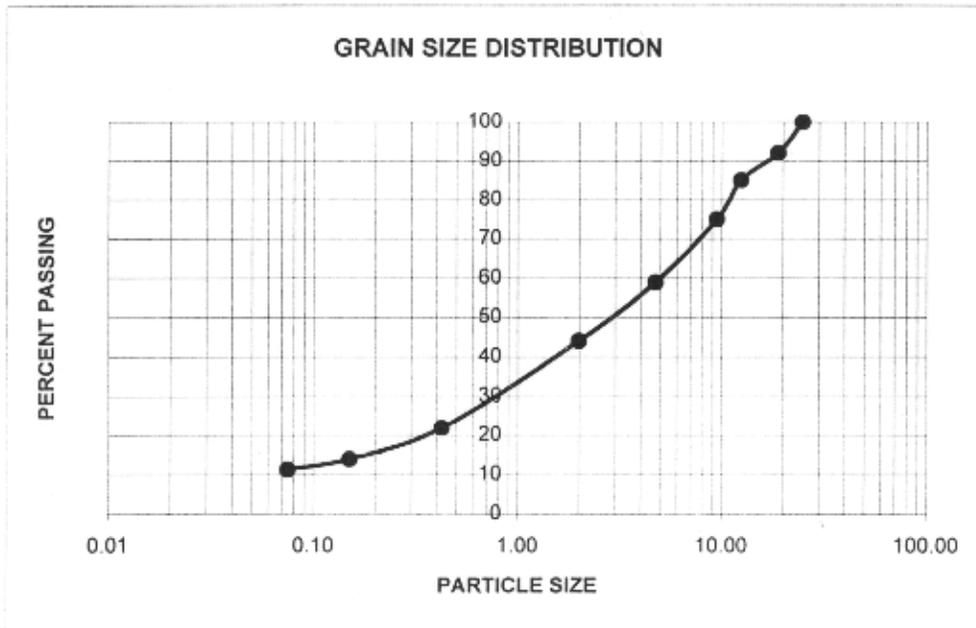
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	92
1/2"	85
3/8"	75
No. 4	59
No. 10	44
No. 40	22
No. 100	14
No. 200	11.3

Moisture Content (%) 2.3



Respectfully Submitted:
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Tim Byres, SET

Addressee: (2)

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GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-03 @ 20'

SAMPLE: Gravel (GM)

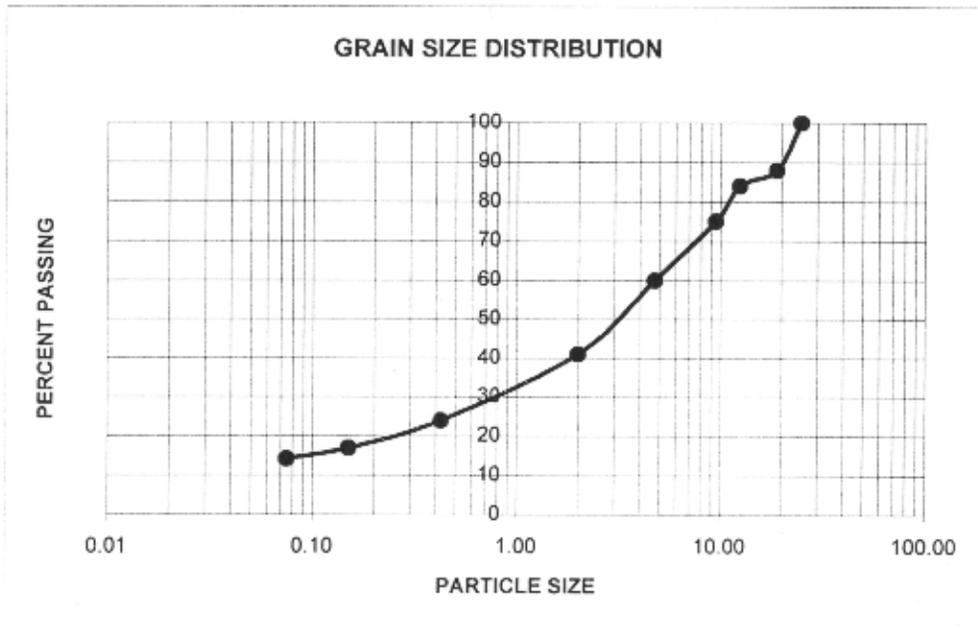
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	88
1/2"	84
3/8"	75
No. 4	60
No. 10	41
No. 40	24
No. 100	17
No. 200	14.2

Moisture Content (%) 1.5



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3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

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ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.



Tim Byres, SET

Addressee: (2)

Department of the Army
Albuquerque District Corps of Engineers
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-04 @ 2.5'

SAMPLE: Gravel (GM)

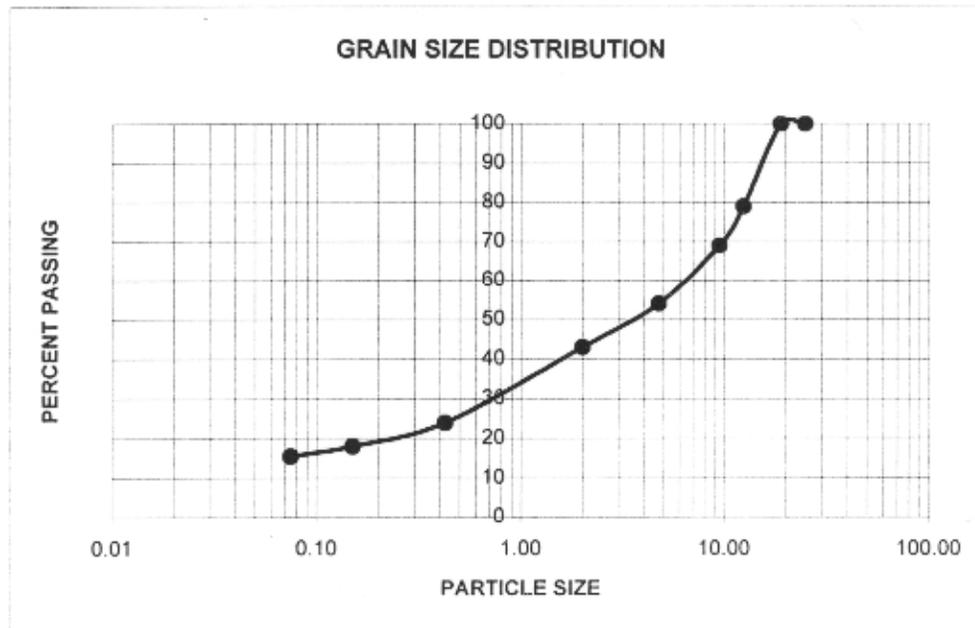
ATTEBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	100
1/2"	79
3/8"	69
No. 4	54
No. 10	43
No. 40	24
No. 100	18
No. 200	15.5

Moisture Content (%) 2.9

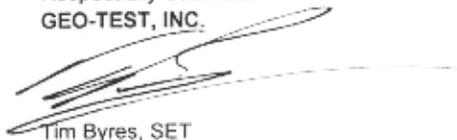


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SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

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NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.



Tim Byres, SET

Addressee: (2)

Department of the Army
 Albuquerque District Corps of Engineers
 Transportation Department
 4101 Jefferson Plaza NE
 Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-04 @ 5'

SAMPLE: Clayey Gravel (GC)

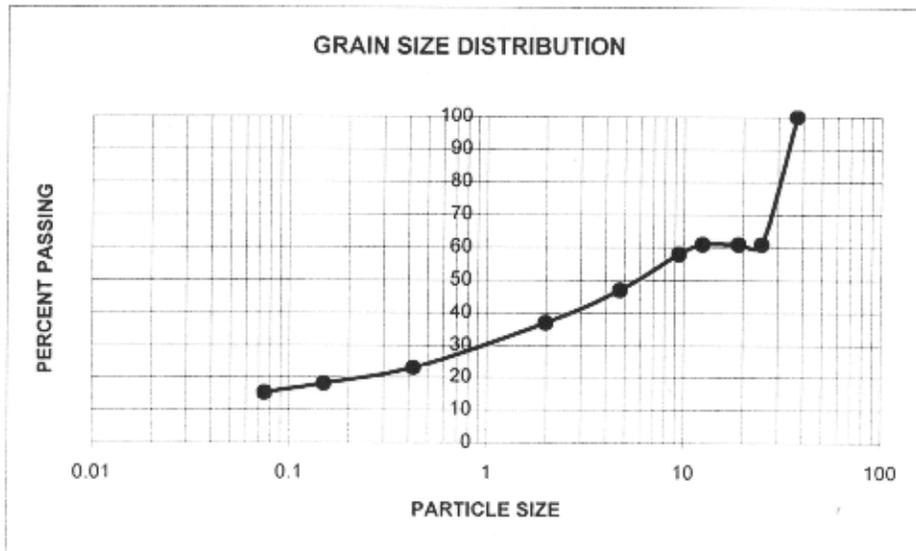
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit 22
 Plasticity Index: 10

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1.5"	100
1"	61
3/4"	61
1/2"	61
3/8"	58
No. 4	47
No. 10	37
No. 40	23
No. 100	18
No. 200	15.1

Moisture Content (%) 3.6



Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

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 3204 RICHARDS LANE
 SANTA FE,
 NEW MEXICO
 87507
 (505) 471-1101
 FAX (505) 471-2245

8528 CALLE ALAMEDA NE
 ALBUQUERQUE,
 NEW MEXICO
 87113
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 NEW MEXICO
 88007
 (505) 526-6260
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PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-04 @ 7.5'

SAMPLE: Gravel (GM)

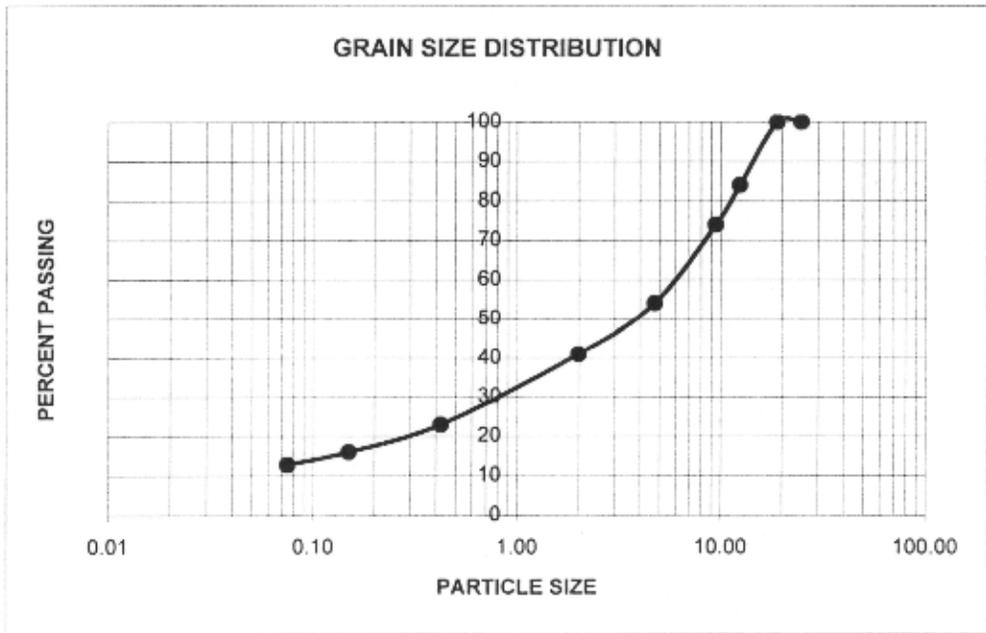
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	100
1/2"	84
3/8"	74
No. 4	54
No. 10	41
No. 40	23
No. 100	16
No. 200	12.8

Moisture Content (%) 0.4



GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

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ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

Department of the Army
 Albuquerque District Corps of Engineers
 4101 Jefferson Plaza NE
 Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-04 @ 10'

SAMPLE: Slightly Silty Sand, poorly graded (SM-SP)

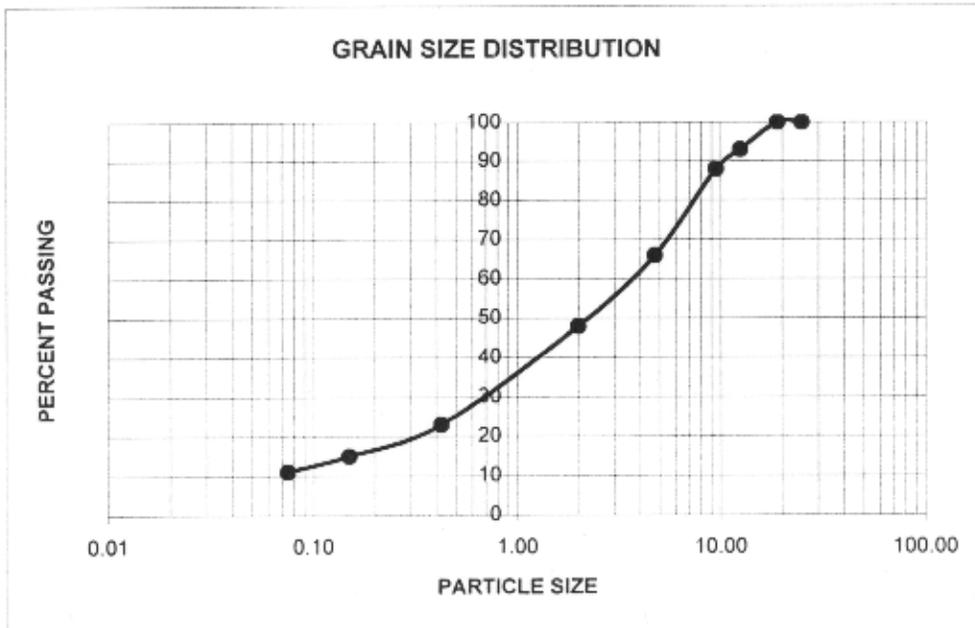
ATTEBERG LIMITS (ASTM D-4318)

Liquid Limit NV
 Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	100
1/2"	93
3/8"	88
No. 4	66
No. 10	48
No. 40	23
No. 100	15
No. 200	11.1

Moisture Content (%) 1.3



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 SANTA FE,
 NEW MEXICO
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 (505) 471-1101
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 (505) 857-0933
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 LAS CRUCES
 NEW MEXICO
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 (505) 526-6260
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Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

Department of the Army
 Albuquerque District Corps of Engineers
 4101 Jefferson Plaza NE
 Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-04 @ 12.5'

SAMPLE: Gravel (GM)

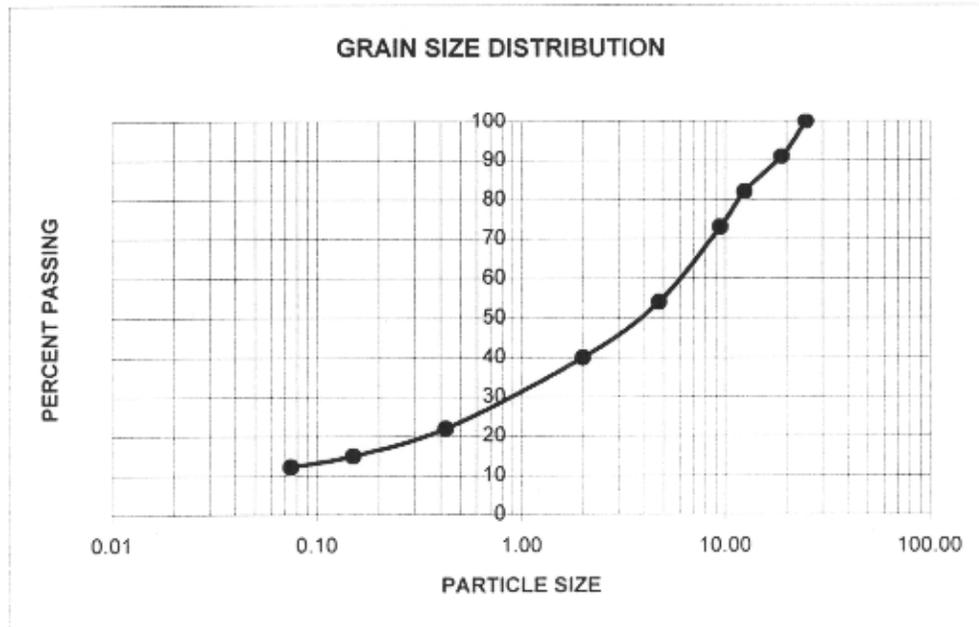
ATTEBERG LIMITS (ASTM D-4318)

Liquid Limit NV
 Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	91
1/2"	82
3/8"	73
No. 4	54
No. 10	40
No. 40	22
No. 100	15
No. 200	12.3

Moisture Content (%) 1.0



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 SANTA FE,
 NEW MEXICO
 87507
 (505) 471-1101
 FAX (505) 471-2245

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 ALBUQUERQUE,
 NEW MEXICO
 87113
 (505) 857-0933
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2805-A LAS VEGAS CT.
 LAS CRUCES
 NEW MEXICO
 88007
 (505) 526-6260
 FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

[Signature]
 Tim Byres, SET

Addressee: (2)

Department of the Army
Albuquerque District Corps of Engineers
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-04 @ 15'

SAMPLE: Gravel (GM)

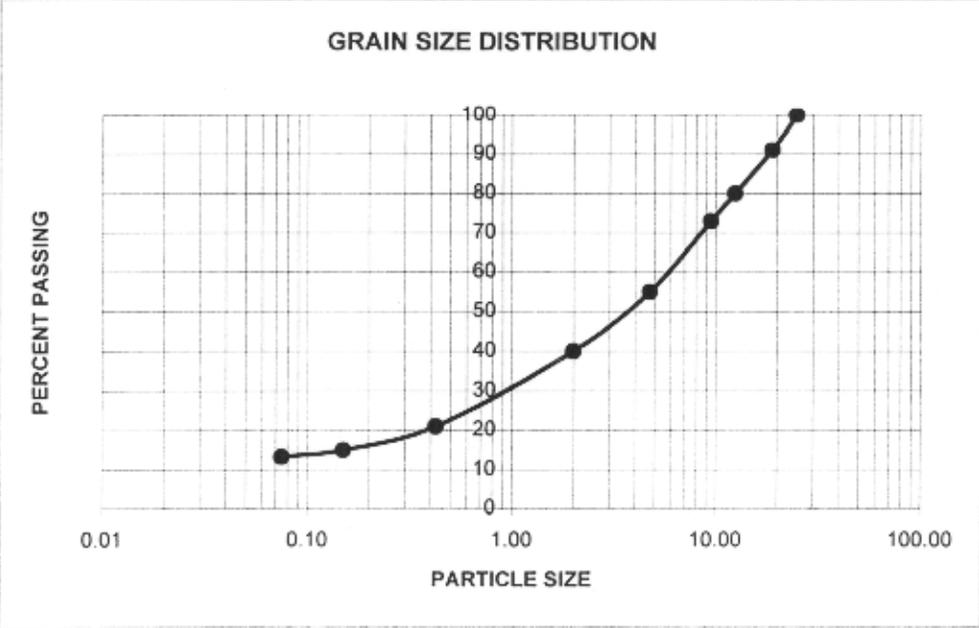
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	91
1/2"	80
3/8"	73
No. 4	55
No. 10	40
No. 40	21
No. 100	15
No. 200	13.3

Moisture Content (%) 2.3



GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET
Addressee: (2)

Department of the Army
Albuquerque District Corps of Engineers
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-04 @ 17.5'

SAMPLE: Silty Sand (SM)

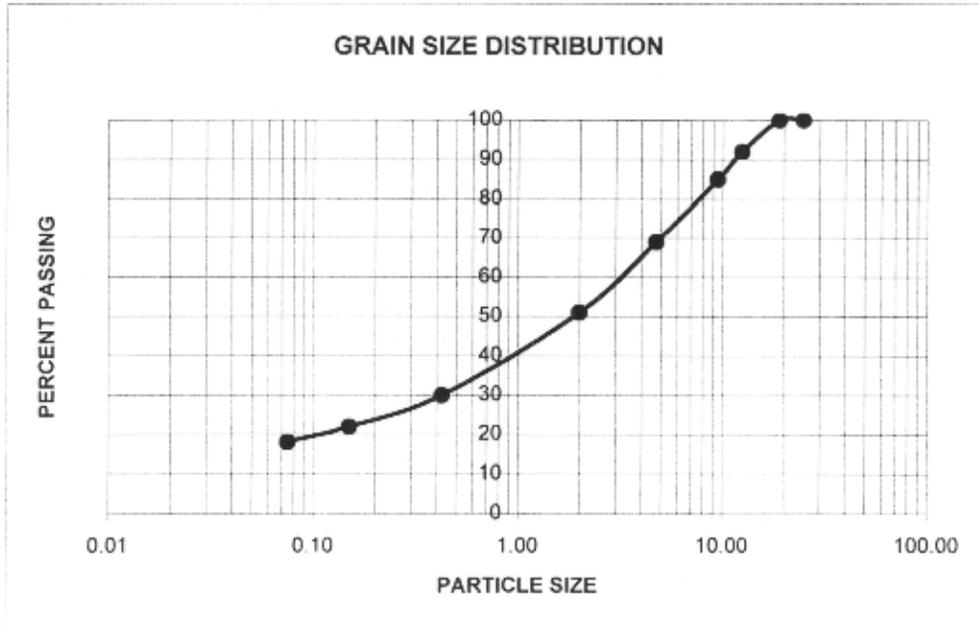
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1"	100
3/4"	100
1/2"	92
3/8"	85
No. 4	69
No. 10	51
No. 40	30
No. 100	22
No. 200	18.1

Moisture Content (%) 2.6



GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

Department of the Army
 Albuquerque District Corps of Engineers
 4101 Jefferson Plaza NE
 Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-04 @ 20'

SAMPLE: Silt (ML)

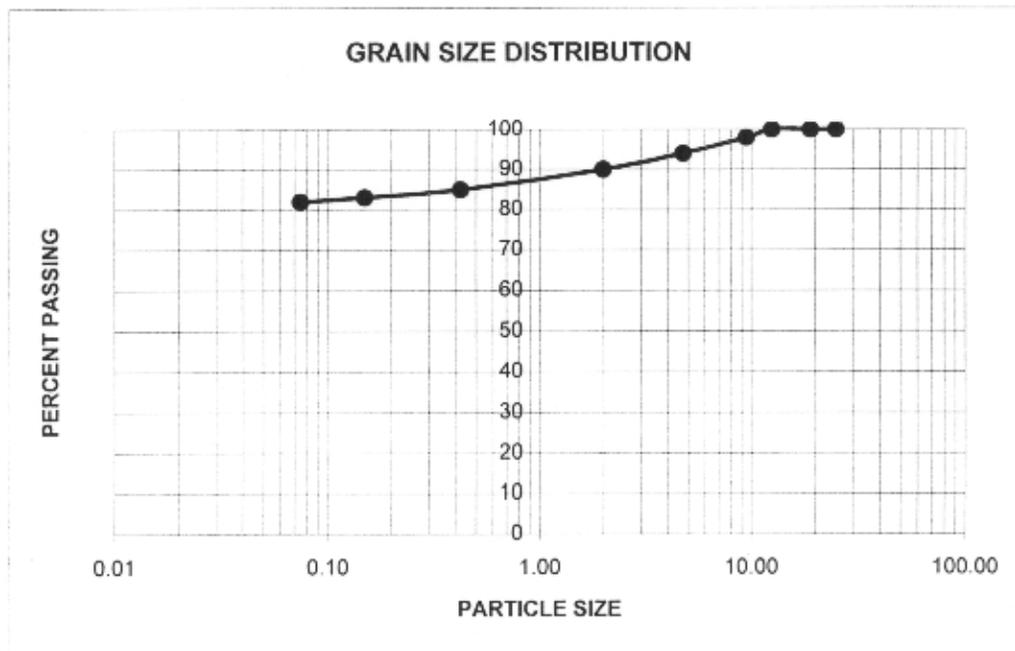
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
 Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1/2"	100
3/8"	98
No. 4	94
No. 10	90
No. 40	85
No. 100	83
No. 200	81.9

Moisture Content (%) 3.2



GEO-TEST, INC.
 3204 RICHARDS LANE
 SANTA FE,
 NEW MEXICO
 87507
 (505) 471-1101
 FAX (505) 471-2245

8528 CALLE ALAMEDA NE
 ALBUQUERQUE,
 NEW MEXICO
 87113
 (505) 857-0933
 FAX (505) 857-0803

2805-A LAS VEGAS CT.
 LAS CRUCES
 NEW MEXICO
 88007
 (505) 526-6260
 FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

[Handwritten Signature]
 Tim Byres, SET

Addressee: (2)

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-05 @ 2.5'

SAMPLE: Silty Sand (SM)

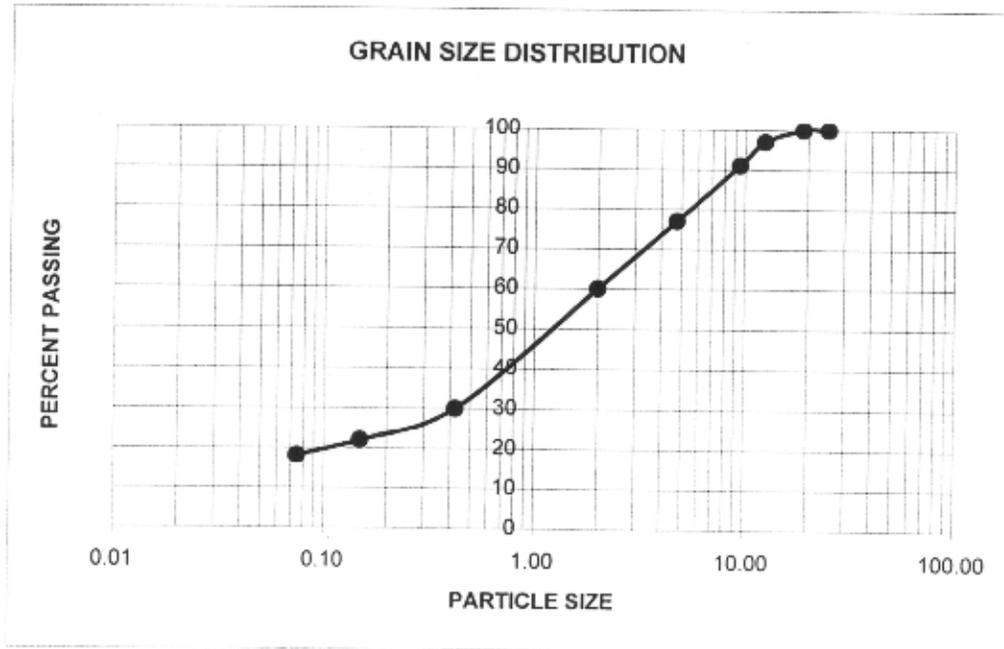
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
 Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
3/4"	100
1/2"	97
3/8"	91
No. 4	77
No. 10	60
No. 40	30
No. 100	22
No. 200	18.1

Moisture Content (%) 4.1



Respectfully Submitted:
GEO-TEST, INC.

[Signature]
 Tim Byres, SET

Addressee: (2)



Department of the Army
 Albuquerque District Corps of Engineers
 4101 Jefferson Plaza NE
 Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-05 @ 5'

SAMPLE: Gravel (GM)

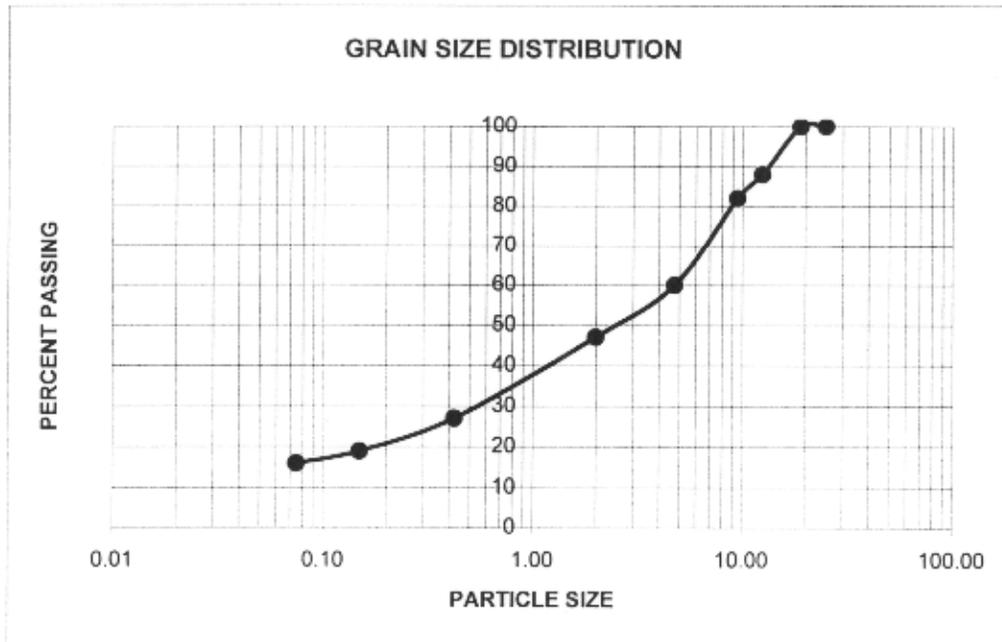
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
 Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
3/4"	100
1/2"	88
3/8"	82
No. 4	60
No. 10	47
No. 40	27
No. 100	19
No. 200	16.0

Moisture Content (%) 2.7



GEO-TEST, INC.
 3204 RICHARDS LANE
 SANTA FE,
 NEW MEXICO
 87507
 (505) 471-1101
 FAX (505) 471-2245

8528 CALLE ALAMEDA NE
 ALBUQUERQUE,
 NEW MEXICO
 87113
 (505) 857-0933
 FAX (505) 857-0803

2805-A LAS VEGAS CT.
 LAS CRUCES
 NEW MEXICO
 88007
 (505) 526-6260
 FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

PROJECT: RAMS Facility
 White Sands Missile Range
 New Mexico

SAMPLE LOCATION: AG-05 @ 7.5'

SAMPLE: Silty Sand (SM)

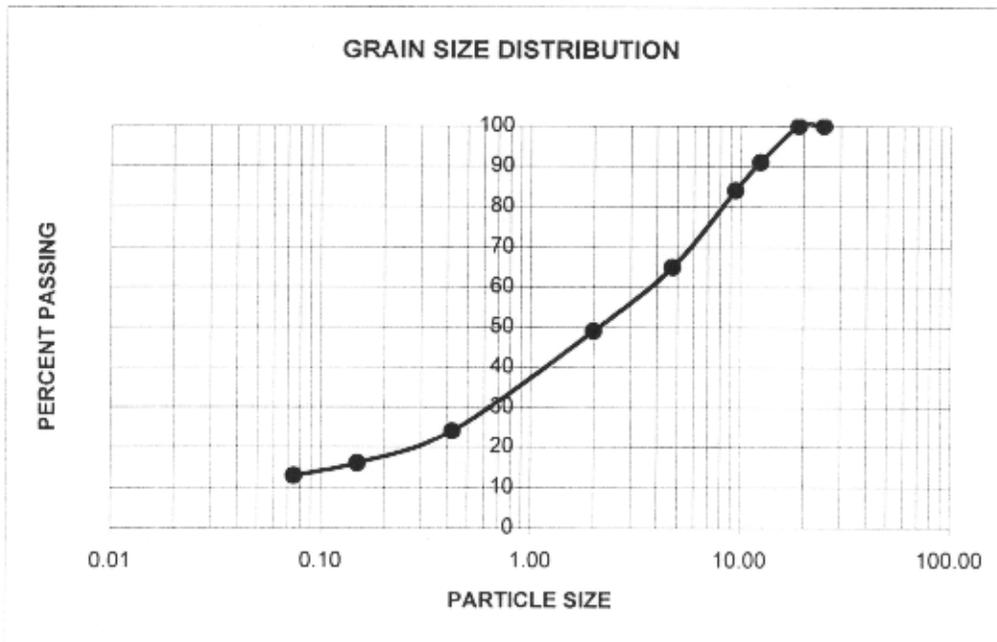
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
 Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
3/4"	100
1/2"	91
3/8"	84
No. 4	65
No. 10	49
No. 40	24
No. 100	16
No. 200	12.9

Moisture Content (%) 2.6



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 3204 RICHARDS LANE
 SANTA FE,
 NEW MEXICO
 87507
 (505) 471-1101
 FAX (505) 471-2245

8528 CALLE ALAMEDA NE
 ALBUQUERQUE,
 NEW MEXICO
 87113
 (505) 857-0933
 FAX (505) 857-0803

2805-A LAS VEGAS CT.
 LAS CRUCES
 NEW MEXICO
 88007
 (505) 526-6260
 FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-05 @ 10'

SAMPLE: Gravel (GM)

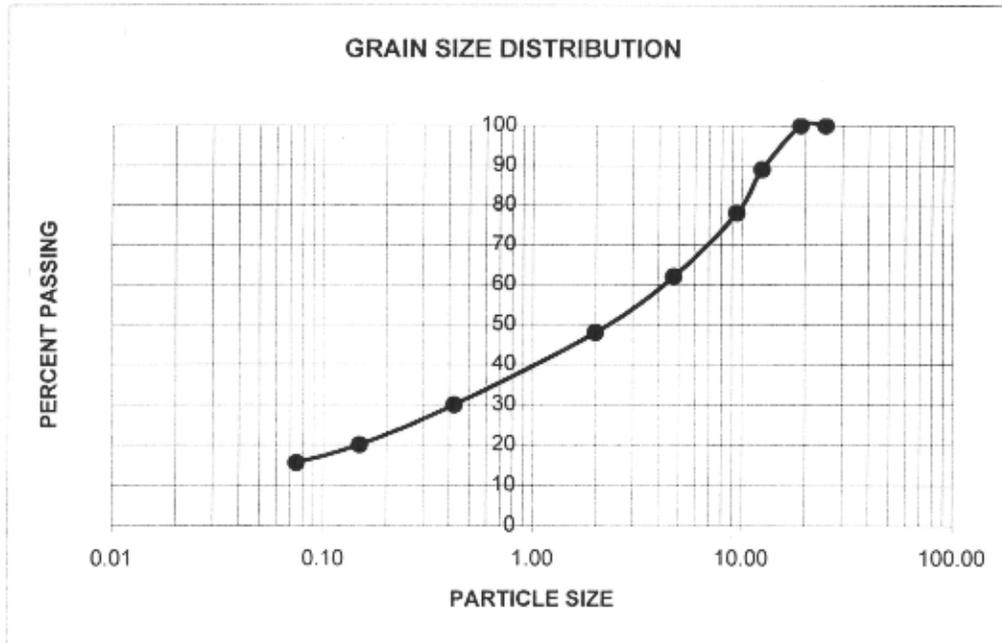
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
3/4"	100
1/2"	89
3/8"	78
No. 4	62
No. 10	48
No. 40	30
No. 100	20
No. 200	15.5

Moisture Content (%) 2.6



GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.



Tim Byles, SET

Addressee: (2)

Department of the Army
Albuquerque District Corps of Engineers
Transportation Department
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-05 @ 12.5'

SAMPLE: Gravel (GP)

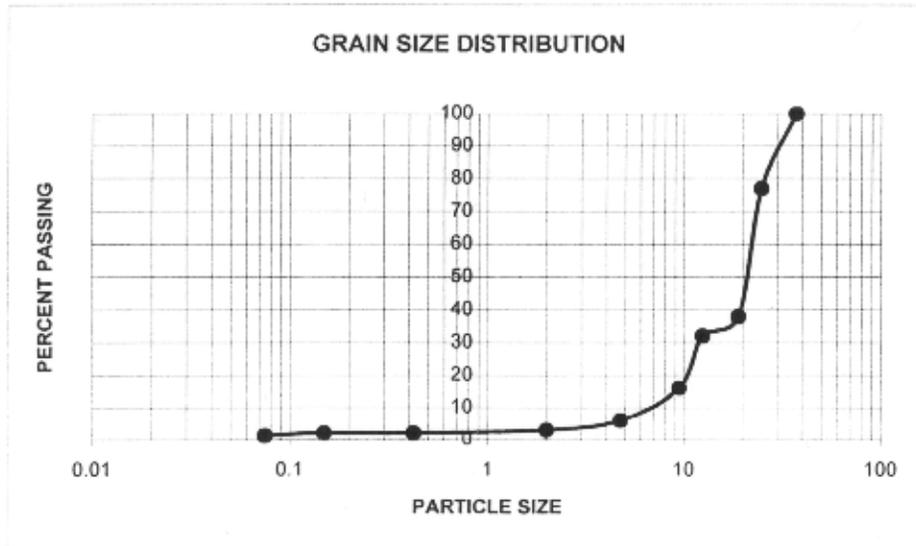
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1.5"	100
1"	77
3/4"	38
1/2"	32
3/8"	16
No. 4	6
No. 10	3
No. 40	2
No. 100	2
No. 200	1.3

Moisture Content (%) 0.5



GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

Department of the Army
Albuquerque District Corps of Engineers
Transportation Department
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 6, 2004
Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-05 @ 15'

SAMPLE: Gravel (GM)

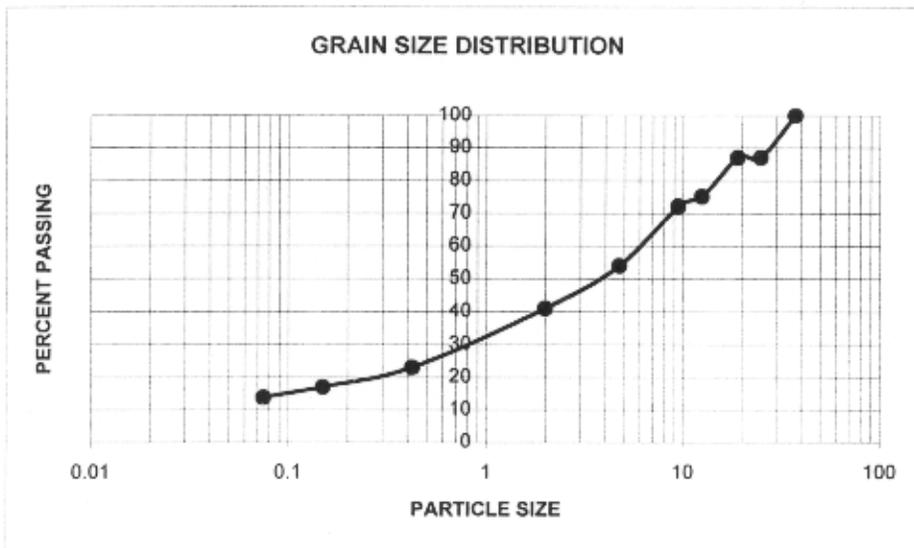
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1.5"	100
1"	87
3/4"	87
1/2"	75
3/8"	72
No. 4	54
No. 10	41
No. 40	23
No. 100	17
No. 200	13.8

Moisture Content (%) 3.0



GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tipi Byers, SET

Addressee: (2)

Department of the Army
Albuquerque District Corps of Engineers
Transportation Department
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109

February 6, 2004

Project No. 6-40102

PROJECT: RAMS Facility
White Sands Missile Range
New Mexico

SAMPLE LOCATION: AG-05 @ 17.5'

SAMPLE: Gravel (GM)

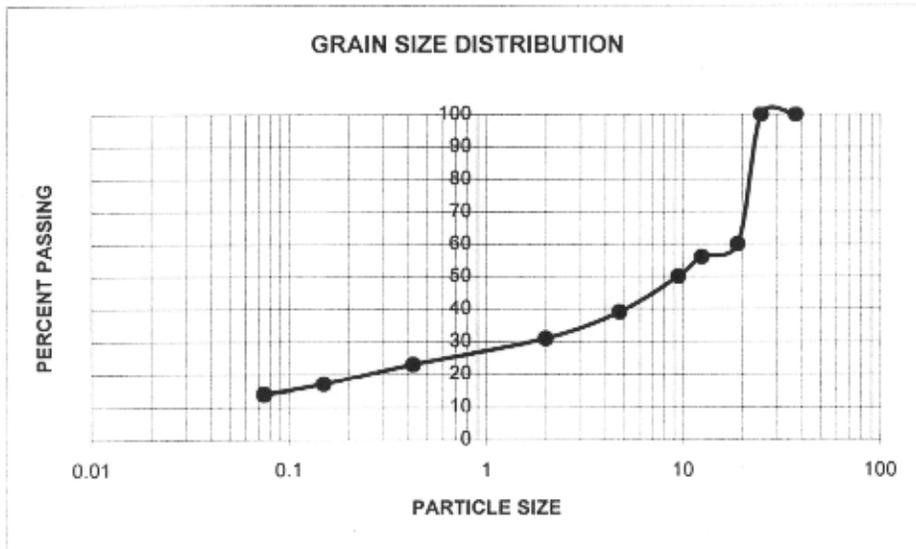
ATTERBERG LIMITS (ASTM D-4318)

Liquid Limit NV
Plasticity Index: NP

SIEVE ANALYSIS (ASTM D-422)(Material Retained on .075mm)

Sieve size	Percent Passing
1.5"	100
1"	100
3/4"	60
1/2"	56
3/8"	50
No. 4	39
No. 10	31
No. 40	23
No. 100	17
No. 200	13.9

Moisture Content (%) 3.9



GEO-TEST, INC.
3204 RICHARDS LANE
SANTA FE,
NEW MEXICO
87507
(505) 471-1101
FAX (505) 471-2245

8528 CALLE ALAMEDA NE
ALBUQUERQUE,
NEW MEXICO
87113
(505) 857-0933
FAX (505) 857-0803

2805-A LAS VEGAS CT.
LAS CRUCES
NEW MEXICO
88007
(505) 526-6260
FAX (505) 523-1660

Respectfully Submitted:
GEO-TEST, INC.

Tim Byres, SET

Addressee: (2)

APPENDIX O

DRAWINGS

(FOR INFORMATION ONLY)

APPENDIX O

INDEX OF DRAWINGS
(PROVIDED ON CD)

	COVER
C-2	SITE MODIFICATION PLANS
A-1	FLOOR PLAN, DETAILS, SCHEDULES
A-2	ELEVATIONS
M-1	HVAC FLOOR PLAN
M-2	ENLARGED HVAC FLOOR PLANS
E-1	POWER PLAN, SCHEDULES & NOTES
E-2	LIGHTING PLAN & SCHEDULE, LEGEND
E-3	SPECIAL SYSTEMS PLAN & NOTES, POWER RISER

PRE-PROPOSAL CONFERENCE

ATTENDANCE SHEET

SOLICITATION NUMBER: W912PP-04-R-0004

PROJECT TITLE: Design/Build Upgrade National Radar Cross Section Facility,
White Sands Missile Range, Otero County, NM

DATE/TIME: 4 Feb 04 / 10:00 am

NAME	ORGANIZATION	PHONE NUMBER
N. N. Gencagö	BRG - ENGINNERIA	505-525-2278
M. DOBBIN	R-CON/BREY ENG.	505-525-2278
PAUL FAVA	INTEGRATED CONTROLS	505-884-1970
PHIL JESTER	INTEGRATED CONTROLS	505-884-1970
ERIC SCHULTZ	B. Brey Stern	505-998-5908
MATTHEW WOODBURN	AN ANTHONY K. INC.	79.683.3696
Kent Hightet	CNI	972-743-9398
JIM VORREBERG	VISTAG UNLIMITED	505 526 1022
REX T GLOVER	METRO MECHANICAL	505-527-1042
STEPHEN JAMES	ASCG/MALOG	505-247-0294
Tim Archibegue	ASCG/MALOG	505-247-0294
BILL GRIFFIS	ASCG/MALOG	505-247-0294
MANNY GUARDOLA	GUARDOLA CONST.	505-257-2279
Morgan Kramm	ASCG	505-247-0294
Jon Anthony	ASGG	505-247-0294
Davin Espinosa	AJAC ENTERPRISES	505-897-0120
WILLARD EASTMAN	TDS/DY	505-242-6002
Frank Sirett	WHOLE CONST. INC.	505-479-1551
Wes Miller	MORAL CRASS CO	505-524-8653
Dean Pogue	CD MECHANICAL	505-382-8474

PRE-PROPOSAL CONFERENCE

ATTENDANCE SHEET

SOLICITATION NUMBER: W912PP-04-R-0004

PROJECT TITLE: Design/Build Upgrade National Radar Cross Section Facility,
White Sands Missile Range, Otero County, NM

DATE/TIME: 4 Feb 04 / 10:00 am

NAME	ORGANIZATION	PHONE NUMBER
GILBERT SOLTERO	SAMCON INC	993-0430
ERIC SPRINGER	SAMCON INC	505 271 2025
RON TUCKER	COL ARCHITECTS	505 765 1020
ARLINGTON BREWBAKER	BREWBAKER	505-522-5274
RICK LARA	CLASSIC INV. INC.	505-523-2053
Gabriel Murry	Cupit F. Co., Inc	505.524.9384
Wayne Jones	ZUNI ELECTRIC	505-437-6514
JOE NEWCOMER	SOLAR ELECTRIC	505 678 6807
Chris Tompkins	" "	" " "
BRANDY Hemmingsen	MVF	505-678-6436
John R. Flores	"	" " "
Paulc Shaw	49CES/CECN	505-572-5491
John Morgan	"	"
Michael Davalos	49CES/CECP	572-3496
RS BERRY	CUMBRE	505-298-2019
John Hymer	Cumbre	505-980-4780
GEORGE FISH	COFE	505-479-6095 x28
BRAD Peterson	DIAMANTE CONTRACTORS	915.351-6670
FERNANDO RUIZ ESPARZA	DIAMANTE CONT. INC	(915) 351-6670
ARTHUR B MONTONA	DWJMIHN	505-889-4300
SUSAN BITTICH	Corpor of Engr	505 342-3397

